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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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FINNEGAN HENDERSON FARABOW
GARRETT & DUNNER LLP
1300 I STREET NW
WASHINGTON, DC 200053315

EXAMINER

EINSMANN, MARGARET V

ART UNIT

PAPER NUMBER

1751

DATE MAILED: 09/28/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/335,742

Applicant(s)

AUDOUSSET, MARIE-PASCALE

Examiner

Margaret Einsmann

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on 06 August 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) 1-3, 5-9 and 11-56 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) 1-3, 5-9, 11-56 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114 was filed in this application after appeal to the Board of Patent Appeals and Interferences, but prior to a decision on the appeal. Since this application is eligible for continued examination under 37 CFR 1.114 and the fee set forth in 37 CFR 1.17(e) has been timely paid, the appeal has been withdrawn pursuant to 37 CFR 1.114 and prosecution in this application has been reopened pursuant to 37 CFR 1.114. Applicant's submission, remarks and claim amendments, filed on 8/6/2004 has been entered and carefully considered. The pending claims are 1-3,5-9,11-30,32-56

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-3,5-9,11-27-30, 32-34,37-56 are rejected under 35 U.S.C. 103(a) as being unpatentable over Henkel in view of Tsujino.

Henkel, WO 92/13824, teaches compounds of formula (1) as developer compounds for the production of oxidation hair colorants. Henkel's preferred developers of formula (1) include the claimed 1,8-bis(2,5-diaminophenoxy)-3,6-dioxaoctane first oxidation base and acid addition salts thereof (e.g. tetrahydrochloride)

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(see example 1.1) Henkel teaches that very brilliant and uniform hair colors may be obtained with good color fastness properties when the developers of formula (I) are mixed with suitable couplers. (Abstract) Henkel exemplifies various compositions which contain the claimed first oxidation base in combination with a coupler as claimed, e.g. 1-naphthol and m-aminophenol, wherein the oxidation bases and couplers are present in the claimed amounts, See examples 2.1-2.13. The compositions are aqueous and may contain solvents and adjuvants as claimed in the claimed amounts. See page 4 line 29 to page 5 line 16 and example 2. Henkel teaches that the compositions may also contain other known primary intermediates in order to vary the nuances, as well as direct dyes as claimed. See page 4 lines 12-17. Henkel's exemplified compositions also contain ammonia as claimed, and the compositions may have pH's from 6-10 as claimed. See page 5 last paragraph and example 2. Henkel's teaching of acidic pH's suggests the addition of acidifying agents to the patentee's compositions. Henkel's exemplified compositions are mixed with a hydrogen peroxide oxidant, and are applied to the hair as claimed. Henkel's processes may use other oxidants as claimed (page 5 lines 22-28). Henkel does not teach second oxidation bases as specifically claimed. The patentee also does not appear to teach the specifically claimed uricase oxidants, oxidant pH's and additives, separate oxidant application step, and dyeing devices and kits.

Tsujino, U.S. patent 4,961,925 teaches the use of dielectron reducing oxidases, including the claimed uricase, as oxidants for dyeing keratin fibers. (col 1 lines 46-54, col 2 lines 37-40) Tsujino teaches that oxidases are an improvement over

conventionally used hydrogen peroxide oxidants because they result in less damage to the skin and hair. (col 1 lines 11-43). Tsujino teaches that conventional oxidation dyes include second oxidation bases as currently claimed (e.g. para-phenylenediamine) as well as couplers as claimed (e.g. 2-methyl-5(2-hydroxyethylamino)-phenol. (col 2 line 45-col 3 line 3). Tsujino teaches that the dye and oxidant compositions may be separately packaged in kits/devices as claimed. (Col 2 lines 41-44 and examples 7-10).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to add a second oxidation base as claimed to Henkel's exemplified compositions in the claimed amounts, resulting in dyeing compositions as claimed, because Henkel teaches that any conventional oxidation bases may be added to the compositions in order to obtain the desired hair colors and nuances, and Tsujino teaches that the claimed second oxidation bases are conventional in the hair dyeing art, absent a showing otherwise, It would have been obvious to those skilled in the art to use a uricase oxidant as claimed in Henkel's processes because Tsujino teaches that the use of oxidase enzymes in place of Henkel's exemplified hydrogen peroxide results in decreased damage to both the skin and the hair. It would have been obvious to those skilled in the art to package Henkel's compositions in multi-compartment devices and kits as claimed because Henkel suggests such packages are conventional for the storage of two-part oxidative hair dyeing formulations.

The office holds the position that the claimed oxidant additives and separate application steps are patentably indistinct from Henkel's teachings as modified by Tsujino because the same end results are obtained, i.e. the application of a dye, oxidant

and additives to the hair, absent a showing otherwise. Furthermore, the optimization of parameters such as oxidant pH would have been obvious to those skilled in the art in order to obtain the most effective dyeing results, absent a showing otherwise. See *In re Aller*, 105 USPQ 233; *In re Luck*, 177 USPQ 523, and *In re Bosech*, 205 USPQ 215.

Claims 1-3, 5-9, 11-13, 15-38, 41-53 and 55-56 are rejected under 35 USC 103(a) as being unpatentable over Andrillon in view of Henkel.

Andrillon, US 4,065,255 teaches compositions for dyeing hair which contain at least one coupler of the formula exemplified and "at least one" oxidation base, See abstract. The patentee teaches that such compositions are highly resistant to washing, weather and light (Col 1 line 67-col 2 line 18). The oxidation bases and couplers may be present in the claimed amounts at the claimed pH's, wherein acids and bases as claimed may be used to adjust the pH. (Col 4 lines 9-16 and 45-52) Andrillon teaches that organic solvents, including ethanol, may be added to the compositions in the claimed amounts, as well as direct dyes and cosmetic adjuvants as claimed, including antioxidants, sequestering agents and basifying agents. (col 4 lines 17-50). The oxidant may comprise hydrogen peroxide or persulfates as claimed, and may be mixed with the dyeing composition before application or applied separately as claimed. (col 4 lines 40-43 and col 4 line 56 to col 5 line 16). Particularly note example 4 wherein Andrillon exemplifies a composition which contains the second oxidation base p-phenylenediamine and the coupler 2-methyl-5-N-b-hydroxyethylamino phenol as claimed, which composition is mixed with hydrogen peroxide and applied to hair as claimed. Andrillon does not teach the 1,8-bis(2,5-diaminophenoxy)-3,6-dioxaoctane first

oxidation base as claimed, or specifically teach the claimed oxidant additives and pH's, the specific additives of claims 28-29, or the claimed kits and devices.

Henkel is relied upon as set forth above as teaching that the claimed 1,8-bis(2,5-diaminophenoxy)-3,6-dioxaoctane first oxidation base is a preferred oxidation base for use in hair dyeing compositions which contain suitable couplers because very brilliant and uniform hair colors may be obtained with good color fastness properties. Note that Henkel teaches that aminophenols are suitable couplers. See abstract. Henkel is also relied upon above as teaching that the patentee's oxidation bases and couplers may be combined with conventional oxidation bases.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to add the claimed 1,8-bis(2,5-diaminophenoxy)-3,6-dioxaoctane first oxidation base to Andrillon's compositions, such as the composition of example 4 wherein the compositions are applied to hair in combination with oxidants as claimed in dyeing processes as claimed, because Andrillon suggests that mixtures of oxidation bases may be used in the patentee's compositions and processes and Henkel teaches that this claimed oxidation base may be combined with Andrillon's m-aminophenol couplers and additional oxidation bases. Furthermore, Henkel specifically teaches that the claimed first oxidation base results in dyeings with good fastness properties, a result specifically desired by Andrillon, further motivating those skilled in the art to select Henkel's oxidation base for use in Andrillon's compositions and processes.

It would have been obvious to those skilled in the art to add claimed adjuvants to Andrillon's compositions as modified by Henkel because Andrillon teaches such

additives as appropriate for the patentee's compositions (e.g. acids, solvents, etc).

Furthermore, the office holds the position that the selection of conventionally used adjuvants such as antioxidants and sequestrants would have been obvious to those skilled in the art in order to obtain the most effective hair dyeing compositions.

Andrillon's teaching of separate dye and oxidant compositions suggests their storage in conventional multi-part devices and kits as claimed.

The office holds the position that the claimed oxidant additives and separate application steps are patentably indistinct from Andrillon's teachings as modified by Henkel because the same end results are obtained, i.e. the application of a dye, oxidant and additives to the hair, absent a showing otherwise. Furthermore, the optimization of parameters such as oxidant pH would have been obvious to those skilled in the art in order to obtain the most effective dyeing results, absent a showing otherwise. See *In re Aller*, 105 USPQ 233; *In re Luck*, 177 USPQ 523, and *In re Bosech*, 205 USPQ 215.

Response to Amendment

The Declarations under 37 CFR 1.132 filed 4/15/2003 and 12/19/03 are insufficient to overcome the rejection of claims 1-3,5-9,11- 30, 32-34,37-56 under 35 U.S.C. 103(a) as being unpatentable over Henkel in view of Tsujino, or the rejection of claims 1-3, 5-9, 11-13, 15-38, 41-53 and 55-56 under 35 USC 103(a) as being unpatentable over Andrillon in view of Henkel as set forth in the last Office action because: The first declaration contains a comparison of six hair dyeing compositions; three containing a second oxidation base within the scope of those claimed, and three

compositions containing a second oxidation base not within the scope of the claimed second oxidation base. The results of the comparison, as detailed on page 5 of the declaration, show that the color of hair dyes with compositions according to the invention are unexpectedly more resistant to prolonged exposure to UV radiation and thus are superior thereover. The second declaration compares one more combination as claimed. However, there are a multitude of claimed compositions. All of the second oxidation bases as now claimed are compared in the two declarations. However, the compositions use only one coupler. Is applicant stating that all of the claimed couplers are equivalent even though they are structurally very dissimilar? The nonobviousness of a broader range can be supported by evidence based on results of a narrower range if one of ordinary skill in the art would be able to determine a trend in the exemplified data which would allow the artisan to reasonably extend the probative value thereof. *In re Kollman*, 595 F.2d 48, 201 USPQ 193 (CCPA 1979). In this instance, how do the results of the tests relate to the remaining compositions claimed? Regarding claim 1, there are 4 claimed couplers. It is unclear how this comparison can be used to provide insight into the behavior of the remaining couplers as claimed. Applicant is directed to M.P.E.P 716.02 (d) and (e) for the requirements of comparisons which will overcome a prima facie case of obviousness. Objective evidence of unobvious results must be commensurate in scope with the claims. *In re Prater*, 162 USPQ 541; *In re Tiffin*, 172 USPQ 292; *In re Linder*, 172 USPQ 356; *In re Greenfield*, 197 USPQ 227

Where unobvious results are relied upon as a basis for patentability, a proper comparative showing is a minimum requirement. *In re Eisenhut*, 114 USPQ 287.

Response to Arguments

Applicant's arguments are based on the unpredictability in the art. When one claims such a multitude of compositions, it is unclear how all can be patentable if the art is so unpredictable.

Applicant's arguments that the examiner did not address the second declaration resulted in the more careful examination of both declarations. In the first declaration under the results of the comparison testing, compositions 1-3 within the invention show a delta E (change in color or fading) of 1.6 to 2.7 units while the comparison compositions show a delta E of 4 to 5.8 units. Application states that the inventive compositions show a much smaller variation in color after suntest than the comparative compositions. Actually there are several ways to look at this data. The difference between the delta E of 2 and 3 (invention) is greater than the difference between 3(invention) and 4(comparison). How can one say that there is a significant and surprising difference between the invention and comparison compositions when the range of each is so large? Turning to the second declaration, the same test was used as in the first. Yet the invention composition has a delta E of 5.4 which fits nicely within the range of comparison compositions of the first declaration (4.0, 5.5 and 5.8). An explanation of the data and relevance thereof is requested.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Margaret Einsmann whose telephone number is 571-



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272-1314. The examiner can normally be reached on 7:00 AM -4:30 PM M-Th and alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Yogendra Gupta can be reached on 571-272-1316. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9306 for regular communications and (703) 872-9306 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 571-272-0994.



Margaret Einsmann
Primary Examiner
Art Unit 1751

September 21, 2004